

DEC 11 2006

Remarks

Claims 1-29 are currently pending in the patent application. For the reasons and arguments set forth below, Applicant respectfully maintains that the claimed invention is allowable over the cited references.

The Final Office Action dated October 13, 2006 indicated the following rejections: that claims 1, 2, 4, and 8 stand provisionally rejected on the ground of obviousness-type double patenting over Avery *et al.* (U.S. Application No. 10/796,484); that claims 14, 15, 16 and 17 stand provisionally rejected on the ground of obviousness-type double patenting over claims (12 & 13), 14, 15 and 17 of the copending Application No. 10/796,484; that claims 23 and 26-27 stand provisionally rejected on the ground of obviousness-type double patenting over claims (19 & 23) and 21-22 of the copending Application No. 10/796,484; that claims 12 and 13 stand provisionally rejected on the ground of obviousness-type double patenting over claims (12 & 13) of copending Application No. 10/796,484; that claims 1-29 stand rejected under 35 U.S.C. § 112(2); and that claims 1-10, 13-14, 16-18, 22-26 and 29 stand rejected under 35 U.S.C. § 103(a) over Garreau (U.S. Patent No. 6,425,101).

Applicant respectfully traverses the provisional obvious-type double patenting rejections of claims 1, 2, 4, 8, 14-17, 23, 26-27 and 29. To maintain an obviousness-type double patenting rejection, the Examiner must largely comply with the same standards as those applicable to a Section 103 rejection. In this instance, Applicant maintains that the double-patenting rejections are improper because the claims of co-pending Application No. 10/796,484 do not contain a test-signal sense circuit or a test-signal sense means. Moreover, pursuant to M.P.E.P. § 804, with the remaining rejections having been addressed and overcome for the reasons discussed below, these provisional rejections should be withdrawn.

Generally, the Final Office Action repeats the claim rejections in the statement of rejections, and, in the Response to Arguments section, selectively addresses limited aspects of the Applicant's traversals presented in the previous Office Action Response filed July 11, 2006, without addressing substantial aspects of the Applicant's traversals and the related impropriety of the rejections. For example, the Final Office Action is silent as to the Applicant's traversals regarding the §112(2) rejections. As is consistent with M.P.E.P. §707.07(f) and 35 U.S.C. §132, the Examiner should take note of

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Applicant's traversals and answer the same; should the rejections be maintained, Applicant requests that the Examiner consider these traversals, answer the same and further provide the Applicant with an opportunity to assess the Examiner's response.

In view of the above, Applicant traverses all of the §§112 and 103 rejections based, *inter alia*, on the Applicant's traversals previously presented in the previous Office Action Response, which Applicant hereby incorporates by reference. Certain aspects of the claim rejections are addressed further below.

Applicant traverses the §112(2) rejections because the rejections fail to show or allege ambiguity in any of the claimed limitations in a manner consistent with M.P.E.P. § 2173.02, because the terms upon which the rejections are based are widely accepted and implement (thus well understood), and because the specification provides ample description of the terms. Applicant notes that the Section 112(2) rejections of independent claims 1, 14, 13 and 29 based upon the use of the terms "adapted to," "adaptively" and "adapted for" should be removed because these terms are no longer present in the independent claims, per a previous amendment. Regarding claims that still recite terms including "adapted to," "adaptively" and "adapted for," all of these terms have come to be commonly used claim terms. A brief review of the U.S. Patent Office's own database indicates that the term "adapted" has been used in the claims of tens of thousands of issued patents in recent years. Moreover, the specification describes various examples that may be applicable to such limitations, as recited in the previous Office Action Response. Regarding the §112(2) rejection of claim 9 with respect to limitations including signal path routing, several examples are described in the specification (*e.g.*, page 16, line 20, to page 17, line 2), with other examples readily understood by one of skill in the art of test signals and related connectivity. In this regard, all of the §112(2) rejections are improper and should be removed.

Applicant traverses each of the Section 103(a) rejections relying upon the Garreau reference because the cited portions of the Garreau reference do not correspond to the claimed limitations as suggested in the Office Action, and because the alleged motivation is unsupported by any evidence. The following addresses specific claim limitations mentioned in the Response to Arguments of the Final Office Action. In short, the

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Response to Arguments appears to misconstrue the nature of the Garreau reference as relevant to the claimed limitations.

Regarding claims 1, 14, 23 and 29 and the response at pages 12-13 of the Final Office Action, the Examiner appears to misunderstand the function and implementation of the claimed test signal sense circuit and corresponding routing, and in doing so cites to unrelated portions of the Garreau reference. By way of example, limitations in claims 1 and 23 are discussed here in an effort to help clarify these points and provide a better understanding of the technical aspects of the instant invention. Claim 1 is generally directed to subject matter including a test signal sense circuit that detects test signals carried by routing paths, with controllable switches for coupling test signals between dedicated circuitry and a target circuit. The detected test signals are used to control the routing of test signals in the routing paths and may, for example, be used to sense the connectivity of various circuit components such as circuit boards. The Garreau reference, however, fails to teach or suggest such limitations, in that the test signals are simply used to "assess whether the integrated circuit being tested is functioning properly" as indicated in the Final Office Action. That is, while Garreau's I/O lines 211-1 and 211-2 pass test signals that are used in analyzing the function of circuits, Garreau does not teach or suggest that these signals are used to sense the presence or absence of test signals for routing purposes. Garreau further does not teach that any routing is carried out in accordance with any sensed signals or circuit connectivity relating to the same.

Regarding claim 23, the claimed limitations are generally directed to inter-connectable circuit boards in a prototype arrangement, with each circuit board including routing switches, where interconnectivity between the boards is detected. That is, the circuit boards in claim 23 each include JTAG routing switches, and further include a configurator for controlling the switches. Neither Garreau's master controller 202 nor the slave target device 206 includes test signal routing switches. Rather, as discussed in the previous Office Action Response, the switching (via switch 400) in the Garreau reference is separate from either the master controller 202 or the slave device 206. In short, Garreau's passing of test signals between an off-chip master controller 202 (including JTAG controller 210) and a slave target device 206 (including integrated circuits IC1-

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IC4) using a programmable switch (400) that is separate from either the controller 202 or the target device 206 has no correspondence to the claimed limitations. In this regard, Garreau's master controller 202 and slave target device 206 are not inter-connectable circuit boards in the context of the limitations in claim 23, as asserted in the Final Office Action.

In addition to the above and as consistent with the Applicant's traversals in the previous Office Action Response, neither the previous Office Action nor Final Office Action has provided evidence of motivation for various assertions and proposed modifications of the Garreau reference. As the traversals and arguments presented in the previous Office Action Response are incorporated here, the Applicant has omitted additional discussion here for brevity.

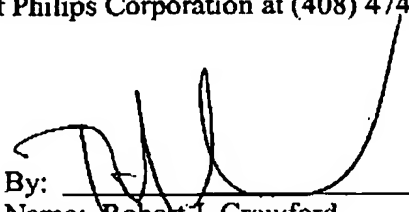
In view of the above, the Section 103(a) rejections of each of the independent claims are improper and Applicant requests that they be withdrawn. In addition, the Section 103(a) rejections of dependent claims 2-13 (which depend from claim 1), 15-22 (which depend from claim 14), and 24-28 (which depend from claim 23), are also improper for the reasons discussed above; in this regard, further discussion of the dependent claims is omitted here for brevity. However, Applicant reserves the right to further address the Examiner's Response to Arguments regarding the same, should the rejections be maintained.

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Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of Philips Corporation at (408) 474-9063.

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